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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/814,781	03/31/2004	Thomas Tanner	GMBH001-US0	4945
35359	7590	10/11/2006		EXAMINER
PATRICK STELLITANO				CHEN, ALAN S
2803 INRIDGE DR.				
AUSTIN, TX 78745			ART UNIT	PAPER NUMBER
				2182

DATE MAILED: 10/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/814,781	TANNER, THOMAS	
	Examiner	Art Unit	
	Alan S. Chen	2182	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ____ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 19 August 2004.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-18 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
 5) Claim(s) ____ is/are allowed.
 6) Claim(s) 1-18 is/are rejected.
 7) Claim(s) ____ is/are objected to.
 8) Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on 19 August 2004 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. ____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____ . |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date ____ . | 6) <input type="checkbox"/> Other: ____ . |

DETAILED ACTION

Drawings

1. The drawings are objected to because Fig. 3 has several labels for different signal lines that are illegible due to small font size. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

2. The abstract of the disclosure is objected to because inclusion of legal phraseology. Correction is required. See MPEP § 608.01(b).

Applicant is reminded of the proper language and format for an abstract of the disclosure.

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The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

3. The specification is objected to due to the lack of headings and arrangement of the sections. Below summarizes the preferred arrangement of the specification by the Office.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC.
- (f) BACKGROUND OF THE INVENTION.
 - (1) Field of the Invention.
 - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (g) BRIEF SUMMARY OF THE INVENTION.
- (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (i) DETAILED DESCRIPTION OF THE INVENTION.

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- (j) CLAIM OR CLAIMS (commencing on a separate sheet).
- (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

4. The use of the trademark various has been noted in this application, i.e., pages 10 and 12. It should be capitalized wherever it appears and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-5,8-15,17 and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by US Pat. No. 6,118,817 to Wang.

Independent Claims

7. Per claim 1, Wang discloses a device (*Fig. 11 constitutes the device in its entirety, element 1106 is the client and element 1102 is the server*) for transmitting video data (*Wang expressly teaches the transmission of motion video data*), comprising a host device (*Figs. 11 and 12, element 1102, server*); a remote device (*Figs. 11 and*

13, *element 1106, client*); and a data link between the host device and the remote device (*Fig. 11-13, element 1104*), wherein said host device comprises an adjusting mechanism (*Fig. 1, element 100 and Fig. 12, element 1204*) to reduce the data rate of video data transmitted from a video data source (*Fig. 1, element 1540 and Fig. 12, element 1240*) to the host device by reducing the frame rate of the video data (*Fig. 1, element 120; Column 15, lines 37-50*), which enables the host device to transmit the video data at the reduced data rate to the remote device via the data link (*frame rate reduced, equating to reduction of data rate over the data link, element 1104, to the client, element 1106 and thus requiring lower bandwidth*).

8. Per claim 12, Wang discloses a method (*Fig. 8 and Fig. 11*) of transmitting video data through a data link (*Fig. 12, element 1104*) between a host device (*Fig. 11, element 1102*) and a remote device (*Fig. 11, element 1106*) said host device reducing the data rate of the video data by reducing the frame rate of said video data (*Fig. 8, element 806*), so as to enable transmission of the video data via said data link to the remote device at the reduced data rate (*Column 15, lines 37-50*).

Dependent Claims

9. Per claim 2, Wang discloses claim 1, wherein the adjusting mechanism comprises a first frame buffer (*Fig. 1, elements 102 and 104 are frame buffers*) and buffer control mechanism (*Fig. 1, element 120*) provided such that every nth frame to be transmitted via the data link is grabbed from the video data and stored in said first frame buffer (*Column 15, lines 38-50, frame controller shown in Fig. 1, element 120 passes a selected nth frame to the buffers*).

10. Per claim 3, Wang discloses claim 1, wherein the adjusting mechanism (*Figs. 1 and 12, element 100*) comprises an information storage device that stores information used by the video data source to adjust the frame rate of the video data supplied by the video data source (*Fig. 12, element 100 is part of the memory device, element 1204, thus being an information storage device, one of the major functions being to adjust the frame rate to fit within a restricted bandwidth*).

11. Per claim 4, Wang discloses claim 2, wherein the video data source is preferably a computer (*Column 19, lines 48-66, expressly disclose source of video is another computer system or a computer based device such as video camera*) comprising: a graphics unit capable of generating a video data stream (*Column 19, lines 63-67 disclose 3-D generation requiring graphics unit, such as a processor*) which is transmitted to the host device (*Fig. 1, element 100, video source, element 1540 transmitted to element 100*); Plug and Display interface to enable connection of the adjusting mechanism to the graphics unit (*Fig. 12 clearly shows that the computer generating the video signal and having the graphics unit, needs to be connect to the host device, element 1102, via a common bus, element 1206. Being that Wang expressly states the computer generating the video signal being a separate and different computer, it is required to be plugged in the bus. Once plugged in, various display technologies can be applied, e.g., monitor or printer, element 1220*).

12. Per claim 5, Wang discloses the device of claim 1, wherein the data link comprises an electrical or optical connection (*Column 18, lines 55-60, computer network is inherently a electrical or optical connection*).

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13. Per claims 7-9, Wang discloses the device of claim 1, wherein the remote device comprises a second frame buffer where frames of the video data received via the data link are stored (*Fig. 1, element 102 and 104 are two separate frame buffers*), furthermore the second frame buffer is a double buffer memory (*Figs. 1, elements 102 and 104 are buffers of equal size, therefore the second buffer, e.g., 102, effectively doubles the buffer space*). The remote device comprises a frame rate conversion unit, which reads frames from the second frame buffer according to a predetermined frame rate (*Fig. 1, element 1550, the encoded video signal goes out to the client PC, Fig. 13, element 1304, the encoded signal originally being buffered by the frame buffers, elements 102 and 104 at a frame rate governed by Fig. 1, element 120*).

14. Per claim 10, Wang discloses the device of claim 1, wherein the host device comprises a picture generator to generate a test picture (*Fig. 12, element 1204 shows the host device; Column 19, lines 52-60, image acquisition devices and cameras are used to acquire images to send to encoder in Fig. 12, element 1204*).

15. Per claim 11, Wang discloses the device of claim 1, wherein the host device and the remote are provided such that, in addition to the video data, control data may be transmitted via the data link (*Fig. 12, element 1260 network access circuitry sends more than just encoded video signals. Network packets have header information for control purposes*).

16. Per claim 13, Wang disclose the method of claim 12, wherein the host device grabs every nth frame to be transmitted via the data link from the video data and stores

it (*Column 15, lines 45-50, only passes every nth integer frame, storing the frames in the frame buffer, elements 102 and 104*).

17. Per claim 14, Wang discloses the method of claim 12, wherein information for adjusting the frame rate of the video data supplied by a video data source is transmitted from the host device to the video data source (*Fig. 1, elements 120 adjusts the frame rate, resulting encoded video signal, element 1550 can be sent to the video acquisition circuitry, element 1270, which is another computer; Column 19, lines 52-65*).

18. Per claim 15, Wang discloses the method of claim 12, wherein the video data are transmitted by electrical or optical means via the data link (*Column 18, lines 55-60, computer network is inherently a electrical or optical connection*).

19. Per claim 17, Wang discloses the method of claim 12, wherein the remote device stores frames of the video data received via the data link, said stored frames being read out according to a predetermined frame rate and displayed on a screen (*Fig. 13, element 1106, the client computer receives the decodes the encoded video data sent a reduced frame rate from the server computer in Fig. 12, and displays the data to element 1320*).

20. Per claim 18, Wang discloses the method of claim 12, wherein in addition to the video data, the host device and the remote device transmit control data via the data link (*Fig. 12, element 1260 network access circuitry sends more than just encoded video signals. Network packets have header information for control purposes*).

Claim Rejections - 35 USC § 103

21. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

22. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

23. Claims 6 and 16 are rejected under 35 USC 103(a) as being unpatentable over Wang in view of US Pat. No. 5,941,972 to Hoesel et al. (Hoesel).

Wang discloses claims 5 and 15.

Wang does not disclose expressly the data link that the video data is transmitted over being a serial data link.

Hoesel discloses a plurality of computers connected over a data link (*Fig. 3, element 32*) that is a high-speed serial link.

Wang and Hoesel are analogous art because they are from similar problem solving area utilizing a particular network protocol to communicate between two remote computers.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to utilize a serial data link, such as Fibre Channel, to communicate between two computers.

The suggestion/motivation for doing so would have been the ability to transmit data over significantly large distances, e.g., on the order of tens of kilometers (*Column 2, lines 20-25 of Hoes*e).

Therefore, it would have been obvious to combine Wang with Hoes for the benefit of being unencumbered by a large physical separation of two networked devices.

Conclusion

24. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Patents and patent related publications are cited in the Notice of References Cited (Form PTO-892) attached to this action to further show the state of the art with respect to transmission of video data over a data link with an adjusted frame rate different than the video source.

US Pat. No. 6,212,232 to Reed et al. discloses adjusting the frame rate of a source video based on parameters passed to a frame rate determination unit (Fig. 3, element 304).

US Pat. No. 5,742,274 to Henry et al. discloses capturing only subsets of frames of an incoming video signal to be processed for an output video signal.

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25. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alan S. Chen whose telephone number is 571-272-4143. The examiner can normally be reached on M-F 9am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim N. Huynh can be reached on 571-272-4147. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ASC
09/25/2006

Alan S. Chen

9/25/06